Volume 45 • Issue 1

IMS Bulletin

January/February 2016

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President's Message

Agendas and IMS

IMS President Richard Davis writes: During my one-year apprenticeship as President-elect of IMS, I was often queried about my agenda for IMS. The word "agenda" can conjure up both positive and negative feelings. If a dean enthusiastically espouses a new agenda, then faculty are apt to cringe at the idea of change. So instead of talking about an agenda, let me take a stab at how I would like to guide IMS going forward.

Richard Davis (left) took the President's gavel from Erwin Bolthausen at the IMS annual meeting at JSM in Seattle, in August 2015

Since the term of an IMS President lasts only one year (I am not lobbying for more!), major changes typically take place over more than one presidency. With this in mind, I intend to build on the initiatives that former presidents Bin Yu and Erwin Bolthausen started and begin some of my own.

In her 2014 presidential address in Sydney, Bin suggested that statisticians should own *data science.* This sounded great even if one does not know exactly what data science (DS) entails. Who would not want to own anything with data in the title? I will leave it to others to provide a clear description of DS—for now I'll stick with the "I know it when I see it" definition. Unlike previous "next big things", which tend to have a short shelf life, data science appears to have staying power. This can be seen at many universities, including my own, which are investing huge sums of money in creating Institutes and Centers of Data Science. Statistics needs to play a central, if not a leading role in these developments. **The IMS council has just approved a new Data Science group**, headed by David Dunson, and has discussed other ideas about capturing more of the statistics/probability components, widely defined, of data science.

In his presidential address at JSM, Erwin discussed "relations between statistics and probability theory." He expressed concerns about these two fields drifting further apart, to the detriment of both. IMS is one of the few professional societies that has large representations of both statisticians and probabilists. I have heard anecdotal remarks that probabilists are more aligned with and supportive of mathematical societies than IMS. For certain branches of probability, mathematical societies provide a more natural fit. Even though IMS publishes some of the leading journals in probability theory, we must

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Executive Committee

IMS Members' News

2015 AAAS Fellows

In October 2015, the Council of the American Association for the Advancement of Science (AAAS) elected 347 members as Fellows. Among this list are eight IMS members. These individuals will be recognized for their contributions to science and technology at the Fellows Forum to be held on 13 February 2016 during the AAAS Annual Meeting in Washington DC. The honor of being elected an AAAS Fellow began in 1874 for members whose "efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished." You can read the complete list at http://www.aaas.org/elected-fellows, presented by section affiliation.

One of those elected in the AAAS Section on Engineering was Donald P. Gaver III, Tulane University. In the Section on Statistics there were seven IMS members: Michael Paul Cohen, American Institutes for Research; Patricia A. Jacobs, Naval Postgraduate School; Alan F. Karr, RTI International; Stephen Portnoy, University of Illinois at Urbana-Champaign; James Matthew Robins, Harvard University; Chih-Ling Tsai, University of California, Davis; and Alyson G. Wilson, North Carolina State University.

Judith Rousseau receives Ethel Newbold Prize

The first Ethel Newbold Prize was awarded to Judith Rousseau at the ISI World Statistics Congress 2015 in Rio de Janeiro. The Bernoulli Society established the Newbold Prize to recognize excellence in statistics; awarded every two years, the €2500 prize is supported by Wiley. Judith has been invited to present a talk at the IMS/BS Ninth World Congress on Probability and Statistics in Toronto, July 11–15, 2016 (see the other plenary speakers on page 3). Read more about the prize at http://www.bernoulli-society.org/index.php/prizes?id=207

Judith Rousseau

ISI Elected Members 2015

The International Statistical Institute (ISI) elects individuals into its membership who have made significant contributions to statistics in one or more areas, including: research, applications, statistical practice, statistical education, development of statistical infrastructure, management of statistical services, statistical capacity building, and professional leadership.

Among this year's Elected Members are the following 18 IMS members and Fellows: Probal Chaudhuri, India; Radu Craiu, Canada; Byron J. Gajewski, USA; Jianhua Huang, USA; Nicholas Jewell, USA; Jiming Jiang, USA; Abba Meyer Krieger, USA; Qi Long, USA; Michael T. Longnecker, USA; Wenbin Lu, USA; Guy Philip Nason, UK; Sonja Petrović, Serbia/USA; Natesh Pillai, India; Bruce David Spencer, USA; David Spiegelhalter, UK; Ajit Tamhane, USA; David Alan Stephens, UK; and Glenn Stone, Australia.

New editors for IMS journals

We are pleased to introduce the new editors for four of the IMS journals—*Annals of Applied Statistics, Annals of Applied Probability, Annals of Statistics* and *Electronic Journal of Statistics*—whose terms start January 1, 2016.

The *Annals of Applied Statistics* (*AOAS*) has a new Editor-in-Chief, Tilmann Gneiting, who has been serving as Senior Editor for *AOAS*. Tilmann's webpage is at http://www.math.uni-heidelberg.de/spatial/tilmann/. Tilmann takes over from Stephen E. Fienberg. The other editors are Edoardo Airoldi (computational biology and machine learning), Beth Ann Griffin (social sciences, biostatistics and policy), Karen Kafadar (biology, medicine, and genomics), Brendan Murphy (social sciences and government) and Nicoleta Serban (physical science, engineering, and the environment). See http://www.imstat.org/aoas/

The new editor of the *Annals of Applied Probability* (*AAP*) is Bálint Tóth (http://www.math.bme.hu/~balint/ and http://www.maths.bris.ac.uk/~mabat/). Bálint takes over from Timo Seppäläinen.

Ed George (https://statistics.wharton.upenn.edu/profile/563/) and Tailen Hsing (http://dept.stat.lsa.umich.edu/~thsing/) take over as co-editors of the *Annals of Statistics* (*AOS*) from Peter Hall and Runze Li.

Finally, the co-sponsored *Electronic Journal of Statistics* (*EJS*) has a new editor, Domenico Marinucci, who succeeds George Michailidis. Domenico's webpage is at http://www.mat.uniroma2.it/~marinucc/

The IMS depends on the many hours of dedicated service from its editors, associate editors and referees to maintain the high standard of our journals. We are grateful to all those of you who give up your time in this way. Thank you!

9th World Congress of Probability and Statistics, Toronto, 11–15 July 2016

The 9th World Congress of Probability and Statistics is the latest in a series organized jointly by the Bernoulli Society and the IMS. Held every four years, the congress is a worldwide event covering all branches of statistics and probability. This includes the latest scientific developments in theoretical, methodological, applied and computational statistics and probability, as well as stochastic processes.

Benson Kua/Wikimedia Commons

Confirmed plenary speakers are: Sara van de Geer (Wald Lecture); Bin Yu (Rietz Lecture); Scott Sheffield (Doob Lecture); Ofer Zeitouni (Schramm Lecture); Byeong Park (Laplace Lecture); Valerie Isham (Bernoulli Lecture); Ruth Williams (Kolmogorov Lecture); Servet Martínez (Lévy Lecture); David Brillinger (Tukey Lecture); and five IMS Medallion Lectures, from Frank den Hollander, Vanessa Didelez, Christina Goldschmidt, Arnaud Doucet and Pierre del Moral. See http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

= access published papers online

IMS Journals and Publications

Annals of Statistics: Peter Hall and Runze Li
http://imstat.org/aos
http://projecteuclid.org/aos

Annals of Applied Statistics: Stephen Fienberg
http://imstat.org/aoas
http://projecteuclid.org/aoas

Annals of Probability: Maria Eulalia Vares
http://imstat.org/aop
http://projecteuclid.org/aop

Annals of Applied Probability: Timo Seppäläinen
http://imstat.org/aap
http://projecteuclid.org/aoap

Statistical Science: Peter Green
http://imstat.org/sts
http://projecteuclid.org/ss

IMS Collections
http://imstat.org/publications/imscollections.htm
http://projecteuclid.org/imsc

IMS Monographs and *IMS Textbooks:* David Cox
http://imstat.org/cup/

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: George Michailidis
http://imstat.org/ejs
http://projecteuclid.org/ejs

Electronic Journal of Probability: Brian Rider
http://ejp.ejpecp.org

Electronic Communications in Probability: Sandrine Péché
http://ecp.ejpecp.org

Current Index to Statistics: George Styan
http://www.statindex.org
log into members' area at imstat.org

Journal of Computational and Graphical Statistics: Thomas Lee
http://www.amstat.org/publications/jcgs
log into members' area at imstat.org

Statistics Surveys: Donald Richards
http://imstat.org/ss
http://projecteuclid.org/ssu

Probability Surveys: Ben Hambly
http://imstat.org/ps
http://www.i-journals.org/ps/

IMS-Supported Journals

Annales de l'Institut Henri Poincaré (B): Thierry Bodineau & Lorenzo Zambotti http://imstat.org/aihp
http://projecteuclid.org/aihp

Bayesian Analysis: Marina Vannucci
http://ba.stat.cmu.edu

Bernoulli: Eric Moulines
http://www.bernoulli-society.org/
http://projecteuclid.org/bj

Brazilian Journal of Probability and Statistics: Nancy Lopes Garcia http://imstat.org/bjps
http://projecteuclid.org/bjps

Stochastic Systems: Peter W Glynn
http://www.i-journals.org/ssy/

IMS-Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics: Servet Martinez
http://alea.impa.br/english

Probability and Mathematical Statistics: K. Bogdan, M. Musiela, J. Rosiński, W. Szczotka, & W.A. Woyczyński
http://www.math.uni.wroc.pl/~pms

IMS Awards

Nominate someone for the IMS Carver Awards or Fellowship, or apply for a Travel Award

The Carver Medal was created by the IMS in honor of Harry C. Carver, for exceptional service specifically to the IMS. It is open to any IMS member who has not previously been elected President. See http://imstat.org/awards/carver.html. Deadline February 1.

IMS Fellows demonstrate distinction in research in statistics or probability, by publication of independent work of merit; alternatively, as well-established leaders whose contributions to the field of statistics or probability other than original research is judged of equal value; or whose work has contributed greatly to the utility of and the appreciation of these areas. Candidates for fellowship should have been members of the IMS for at least two years. See http://imstat.org/awards/fellows.htm. Deadline January 31.

You can also apply for a travel award if you are within five years of having received your PhD. The IMS Travel Award funds travel to present a paper or poster at an IMS sponsored or co-sponsored meeting. See http://imstat.org/awards/travel.html. Deadline February 1.

Nominate for 2016 COPSS Awards

Each year, the statistical profession recognizes outstanding members at the Joint Statistical Meetings in an awards ceremony organized by the Committee of Presidents of Statistical Societies (COPSS). Nominations are an important part of the process, and everyone can contribute—from the newest to most senior members of our societies. We recognize excellence in our mentors, colleagues, and friends, and it is important to single out those who have made exceptional contributions to the profession. So take a few minutes, review the various COPSS Awards for 2016, and see if you can identify worthy individuals.

Nominations are being sought for the following COPSS awards, which will be presented at the 2016 JSM in Chicago, Illinois (July 30–August 4). See http://copss.org/awards/ for details of each award's committee chairs and submission procedures.

The Fisher Award and Lectureship is awarded each year for outstanding contributions to aspects of statistics and probability that closely relate to the scientific collection and interpretation of data. The deadline for nominations was December 15.

The Presidents' Award is presented yearly in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who has not yet reached his or her 41st birthday. In the special case of an individual who has received his or her statistically related terminal degree fewer than 12 years prior to the nomination deadline, the individual will be eligible if he or she has not yet reached his or her 46th birthday during the year of the award. Nominations should be sent in PDF format by January 15, 2016, to the Presidents' Award committee chair.

The Elizabeth L. Scott Award is presented biennially (even years) to an individual who has helped foster opportunities in statistics for women and exemplifies the contributions of Elizabeth Scott's lifelong efforts to further the careers of women in academia. Nominations should be submitted in PDF format by January 15, 2016, to the Elizabeth Scott Award committee chair.

These awards are jointly sponsored by IMS, ASA, ENAR, WNAR, and SSC. They represent a discipline-wide acknowledgment of the outstanding contributions of statisticians, regardless of their affiliations with any professional society.

IMS Child Care Initiative: apply by June 1

The purpose of the IMS Child Care Initiative is to encourage and support the participation at IMS Annual Meetings of IMS members who have child care responsibilities. The next IMS Annual Meeting is at the 9th World Congress of Probability and Statistics (July 11–15, 2016, hosted by the Fields Institute in Toronto **w** http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/.

The IMS will reimburse members 80% of the costs of privately arranged child care* (for a dependent under the age of 13) at the IMS Annual Meeting, up to a maximum of US$250 per family. Priority will be given to those presenting papers or posters at the meeting. Not more than 40 grants may be awarded. For details, see http://imstat.org/meetings/childcare.htm

A letter requesting funds must be submitted to IMS Executive Director, Elyse Gustafson, at the IMS office (see panel on page 2 for address) by June 1. The letter should include the following:

- The member's name and email address,
- Copy of registration, and copy of receipt for abstract submission (if applicable), and
- Projected amount of child care expenses for the time of the meeting.

After the meeting, please submit a complete receipt showing total amount of child care expenses, dates of care and names and birth dates of dependents, together with the claiming member's name and address.

* If, instead of hiring a child care provider, the member chooses to bring an unpaid family member or friend to the meeting to provide child care, the IMS can reimburse 80% of the cost of their travel, up to $250.

XL-Files: Yo-Yo Ma on Machine (or Massive) Learning

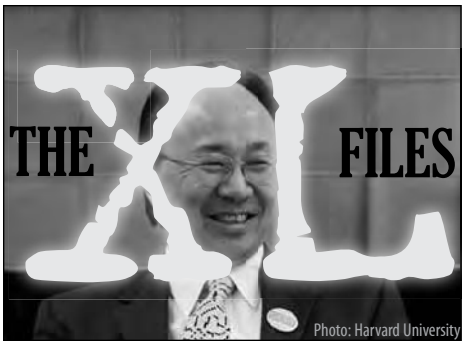

Photo: Harvard University

Xiao-Li Meng writes:

Boston's reputation of being a hub of universities was elevated recently by the inaugural *HUBweek* (Hospital, University and Business), which kicked off with a forum led by Michael Sandel, the "rockstar moralist." Amid an array of thought-provoking questions, Sandel asked if the audience would feel comfortable letting a *smart machine*, i.e., "a very, very good app", trained on a large corpus of student work, to grade essays. To panelist Yo-Yo Ma, this idea is as uncomfortable as relying on "an app for parenting." Using music teaching as an analogy, Ma explained, "The path from one note to the next is going to be different for every single human being on this planet," because the way the second note joins the first depends on the player's physical mechanism, neuromuscular structure, etc. Displaying his trademark passion (but without the cello this time), Ma continued: "If you have an app, I don't care how big the data is and how great your algorithms are, it's finite. The idea of the human spirit actually getting to something that is beyond the finite is a part of every human being, and we want to look for that in every student..." (The original remark is at about 1:30:00 in https://www.youtube.com/watch?v=urcSDiQwaNQ; and check out Conan O'Brien's hilarious answers at 1:24:30!)

Ma's remark touched upon two fundamental questions of *possibilities,* or perhaps *impossibilities*. The obvious one is whether a machine can ever make judgments, or more generally think, like a human. Evidently Ma's answer would be a "no" because human judgments and emotions are too rich to be replicated fully by any "finite" machine. Indeed, machines are generally perceived as being *mechanical*, useful for repetitive tasks, but not for adaptive ones. The term "machine learning" (ML) therefore is unfortunate, because much of its promise builds upon the computer's ability to process and abstract information collected from vastly many individuals and sources. Thus a smart machine like the grading app is meant to serve as a "mass brain" or "meta brain." In that sense, it would be more apt to denote ML as abbreviating "Massive Learning" or "Meta Learning."

This brings up the second, subtler question: Can we fully learn about an individual from studying many others? Personalized treatment sounds heavenly, but where on earth can anyone find enough (any?) guinea pigs that are exactly like *me* to make the promise evidence-based? Similar questions about "transition to similar" have been pondered by philosophers from Galen to Hume. But their contemporary realization injects a healthy dose of skepticism to the modern-day pursuit of fully individualized prediction and inference. Nevertheless, the availability of Big Data, aided by ever-growing computing power, is moving us increasingly close to that ideal, albeit never attainable goal (as Ma correctly emphasized).

The Holy Grail of this individualized learning of course is a balancing act: matching on more individualized attributes in constructing a *proxy learning population for me* increases *relevance* (lower bias) but decreases *robustness* (higher variance) due to smaller data size, but matching on fewer attributes trades lower variance for higher bias. However, such dilemmas provide excellent foundational research opportunities, especially for young talents, as detailed in "*A Trio of Inference Problems That Could Win You a Nobel Prize in Statistics (If You Help Fund It)*" (Meng 2014, http://www.stat.harvard.edu/Faculty_Content/meng/COPSS_50.pdf) and "*There is Individualized Treatment. Why Not Individualized Inference?*" (Liu & Meng, 2015, http://arxiv.org/abs/1510.08539).

The self-reference might make you think that I take myself too seriously. So let me lighten the mood by describing an amazing coincidence. While working on this XL-File on a flight, I noticed that a couple of flight attendants were very excited at spotting a passenger. The photo below should help you to conduct an individualized inference about the coincidence, or rather to infer who the individual was...


Who was sharing a flight with Xiao-Li?

Obituary: Moshe Zakai

1926–2015

Moshe Zakai

We are deeply saddened by the loss of a dear friend. Moshe Zakai, who passed away on November 27 in his hometown Haifa, was an extraordinarily talented man who made a major difference in the life and career of those who collaborated with him as well as many of his students. He was born in 1926 in Sokółka, Poland, and came to Israel (then Palestine) as a child. He is survived by his wife Shulamit (Mita), their children Tamar, Michal and Noam, grandchildren and great-grandchildren.

Zakai obtained his BSc in Electrical Engineering from the Technion – Israel Institute of Technology in 1951. Between 1951 and 1956 he worked at the scientific department of the ministry of defense, as a radar engineer. With a government fellowship, he then did graduate work at the University of Illinois and obtained a PhD in Electrical Engineering in 1958. Upon completion of his PhD, he returned to the scientific department as head of the communication research group. In 1965, he joined the Faculty of Electrical Engineering at the Technion, where he remained throughout his career, retiring in 1998 as a distinguished professor.

Moshe Zakai strongly felt that it was essential to use modern advanced mathematical tools in the study of communication and radar theory. Soon after his PhD he took a keen interest in K. Itô's stochastic integration theory, and in stochastic differential equations as the proper model for dynamical systems driven by white noise. Shortly thereafter, together with Eugene Wong, he realized that there was a serious obstacle in applying Itô's theory: white noise is not physical, and Itô's solution was not continuous in the input (in the sense that driving a stochastic differential equation with an approximation of white noise does not yield a solution that is close to Itô's solution).

Together, Wong and Zakai, in a ground-breaking 1965 paper, showed how to resolve this problem: an extra term (now called the Wong-Zakai correction) has to be added to the "physical" equation, and with this correction term continuity is restored. This observation opened the door to rigorous applications of the Itô calculus in communication and control on the one hand, and to new developments in the theory of stochastic processes on the other. To some extent, one could interpret Martin Hairer's recent theory of regularity structures (for which he received the Fields medal in 2014) as a suitable way to introduce Wong-Zakai corrections in the more challenging setup of nonlinear stochastic *partial* differential equations.

Another topic to which Zakai made a seminal contribution is the theory of nonlinear filtering. Filtering deals with extracting a signal from a noisy observation of it, by computing the conditional distribution of the signal given the observations. In the setup of Gaussian processes, the problem was solved in the 40s by Wiener and Kolmogorov. (It is worthwhile to note that Wiener was motivated by control applications stemming from the WWII effort.) Later, Kalman devised a recursive filter that computed the optimal (linear) filter; Kalman's filter was a crucial element in the development of modern control, radar and communication systems. However, it did not always approximate well the optimal filter for non-Gaussian models, which is generally nonlinear.

The mid-60's saw a flurry of activity in addressing this challenge, and various representations of the optimal filter were derived. However, none of those could be computed effectively, as it required solving an infinite system of coupled stochastic differential equations. Zakai's major insight in his fundamental 1969 paper was to realize that by focusing on an un-normalized version of the conditional density, one could obtain a single bilinear stochastic partial differential equation (the *Zakai Equation*), from which the filter could be easily computed (and which reduces to the Kalman filter in the Gaussian case). Zakai's equation has been the basis for all progress in filtering theory; in particular, modern approaches to compute the filter using genetic algorithms ("particle filters") effectively compute the solution to Zakai's equation.

After a foray with Eugene Wong into the study of multi-parameter stochastic processes, the last two decades of Zakai's professional life saw the completion of his transition to a full time probabilist. He turned his attention to the Malliavin calculus which had been introduced by Malliavin in 1979 to study the smoothness of Gaussian functionals—in particular of solutions to Itô equations—with respect to perturbations of the driving white noise, with the aim of providing a probabilistic proof of Hörmander's criterion for the regularity of solutions of parabolic partial differential equations. Zakai was

Continued from **page 6**

one of a handful of probabilists who started working on Malliavin's calculus shortly after its introduction. Very early on, Zakai introduced a different, more geometric, approach summarized in his influential 1985 paper.

His old concern with the continuity of functionals in the underlying white noise resurfaced in 1990 in one of his many joint papers with David Nualart, now in a more abstract setting, which identified the multiple Wiener integrals which are continuous in the Brownian motion. He then embarked with Süleyman Üstünel and others on a program to apply these ideas to the study of anticipative changes of measures on Wiener space. Their joint book from 2000 summarizes the theory and is the standard reference for the study of transformations on Wiener space.

Zakai's work was recognized by many awards, including the IEEE control society prize and Israel's Rothschild prize. He was a Fellow of the IEEE, Fellow of the Institute of Mathematical Statistics, foreign member of the US National Academy of Engineering and a member of the Israel Academy of Sciences and Humanities. He was a strong proponent of employing sophisticated mathematical tools in engineering, and showed by example that the interaction between mathematics and engineering is highly beneficial to both disciplines. His voice and mentorship will be sorely missed by his many colleagues, students and friends.

Written by Haya Kaspi, Eddy Mayer-Wolf and Ofer Zeitouni

President's Message: Continued from cover

do more to attract probabilists, especially young researchers. Since access to papers published in IMS journals is rather simple to obtain electronically, it is no longer necessary to be a member to possess your own copy of the *Annals*. The argument for being an IMS member has to go beyond just producing superb journals, although this is a vital service to the entire profession. We should all be committed to a society that promotes and advances our field, provides pathways for reviewing and disseminating knowledge, and facilitates interactions and collaborations. While IMS is not perfect, we need to make the case, especially to new researchers, that IMS is a worthwhile investment on their careers.

IMS has supported the New Researchers Conference that precedes JSM for a number of years now. **We now have a New Researchers Group**, spearheaded by Alex Volfosky. The website, which I expect will be dynamic and informative, will be coming online soon. While the NR group will be involved in a number of activities, including organizing the New Researchers Conference, sponsoring sessions at IMS annual meetings and other IMS co-sponsored conferences, and organizing workshops, its main goal is to provide engagement and involvement of early career researchers within IMS. The formation of this group is an exciting development, which is long overdue.

Although there are many issues, both large and small, that we are trying to address in IMS, my *intent* is to create opportunities for members to connect more closely with the society. **IMS has a mechanism for creating groups**, which essentially consists of individuals coming together along a common interest, and calling themselves a group. The FPS (Finance: Probability and Statistics) group has been reasonably successful with organizing annual meetings. So far, IMS has not provided much support for these groups—most do not even have a webpage, and even if they do, they are essentially invisible from the IMS website. I would like to change the model for groups, and the two new ones (New Researchers and Data Science) provide a template for the formation of new groups. In the last several years, IMS has opened up its process for nominating individuals to named lecturers and for proposing sessions at meetings. The formation of groups is essentially a continuation of providing members more direct access to these opportunities. The bottom line is to provide a mechanism for individuals to have more of a voice in a large organization such as IMS. With data science flexing some muscle, IMS has to be forward thinking in trying to engage this group. Already discussions are underway about organizing jointly sponsored sessions on DS with ASA and IEEE at our annual meetings. This is just a start.

Of course, your suggestions and comments for improving IMS are always welcome. I am committed to ensuring that IMS remains a vibrant society and responsive to its members while looking to the future.

e president@imstat.org

Recent papers: *Electronic Journal of Probability*

The Electronic Journal of Probability publishes full-length research articles in probability theory. Access papers at **http://ejp.ejpecp.org/**

Volume 20

1. Exponential inequalities for martingales with applications . . . XIEQUAN FAN, ION GRAMA, QUANSHENG LIU
2. Loop cluster on discrete circles . . . YINSHAN CHANG
3. Random walks generated by equilibrium contact processes . . . THOMAS S. MOUNTFORD, MARIA EULALIA VARES
4. Limit laws for functions of fringe trees for binary search trees and random recursive trees . . . CECILIA HOLMGREN, SVANTE JANSON
5. Multivariate juggling probabilities . . . ARVIND AYYER, JÉRÉMIE BOUTTIER, SYLVIE CORTEEL, FRANÇOIS NUNZI
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7. Phase transitions in nonlinear filtering . . . PATRICK REBESCHINI, RAMON VAN HANDEL
8. Multi-level pinning problems for random walks and self-avoiding lattice paths . . . PIETRO CAPUTO, FABIO MARTINELLI, FABIO LUCIO TONINELLI
9. Asymptotic distribution of two-protected nodes in ternary search trees . . . CECILIA INGRID HOLMGREN, SVANTE JANSON
10. Escape probability and transience for SLE . . . LAURENCE S. FIELD, GREGORY F. LAWLER
11. Inversions and longest increasing subsequence for k-card-minimum random permutations . . . NICHOLAS TRAVERS
12. Maximum principle for an optimal control problem associated to a stochastic variational inequality with delay . . . BAKARIME DIOMANDE, ADRIAN ZALINESCU
13. Stirring two grains of sand . . . KRZYSZTOF BURDZY
14. Strong approximation for additive functionals of geometrically ergodic Markov chains . . . FLORENCE MERLEVÈDE, EMMANUEL RIO
15. Quenched large deviations for multiscale diffusion processes in random environments . . . KONSTANTINOS SPILIOPOULOS
16. A line-breaking construction of the stable trees . . . CHRISTINA GOLDSCHMIDT, BÉNÉDICTE HAAS
17. A mathematical perspective on metastable wetting . . . HUBERT LACOIN, AUGUSTO TEIXEIRA
18. Large deviations for the empirical distribution in the branching random walk . . . OREN LOUIDOR, WILL PERKINS
19. Stochastic evolution equations with multiplicative noise . . . TIJANA LEVAJKOVIĆ, STEVAN PILIPOVIĆ, DORA SELEŠI, MILICA ŽIGIĆ
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24. Almost exponential decay for the exit probability from slabs of ballistic RWRE . . . ENRIQUE GUERRA, ALEJANDRO F. RAMIREZ
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Terence's Stuff: Not happy? Change your mental model

Terry Speed thinks it's worth utilizing the analogy of models to our emotional state: apply a model that helps you be happier

Over the years I have listened to younger people telling me they are not happy with their situation. I'm no counsellor, and have never claimed to be: I don't like giving advice, and usually say so, and I'm reluctant to generalize from the n=1 case studies I know well (my own).

So what do I do? Usually, I just listen, though I will point out inconsistencies—if only to show that I'm listening. I try to avoid making judgments, and I rarely feel happy suggesting things for others to do. But I do ask questions, and that can be a give-away, partially revealing to what I think, and what I think someone should do. What have I learned? Sad to say, not much more that I could have learned with a few web searches, or from reading the writings of Lao Tzu (in a reliable translation). But I needed to know the keywords with which to search, or the aphorisms to note well, and they have taken me many years to learn.

Consider the term *external validation*. This is not an expression that rolls easily off my tongue, but it describes very well what I've often heard, so I've embraced it. I meet unhappy students (and others) who are uncertain whether their work is *good enough*, looking for praise, feeling deeply saddened by its absence—or worse, convinced that they are *no good* unless someone tells them they are. In many cases this praise comes from a high-achieving person, with lots of external evidence of their abilities. Perhaps I'm a bad boss in this respect, because I rarely take time off to praise, to congratulate, or to boost, thinking that there are usually better things to do with my time with others than back-patting. Also, I've always felt that an important part of becoming competent is learning how to assess one's own work, so I think I unconsciously force this issue a little.

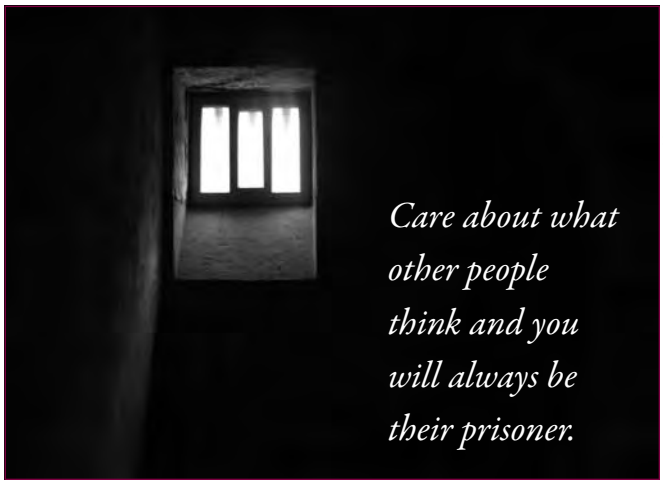
Another form of external validation is the *need to be appreciated*. In general, in our IMS community and elsewhere, contributions to theory are more highly valued than those to applications, so applied statisticians may feel unappreciated. We hear a lot about data science these days, and many of us feel that a good deal of the hype is what we have been doing for much of our lives: applied statistics. Clearly, the funding bodies, presidents and deans pouring money into data science don't appreciate us. So what? Of course elsewhere probabilists are probably feeling unappreciated, perhaps by mathematicians. The web has a lot to offer on this, including *35 Quotes On How To Care Less About What Others Think*, one of which is attributed (most likely falsely) to Lao Tzu: *Care about what other people think and you will always be their prisoner.*

Something I hear a lot from unhappy people is that everyone else is better than them. This can be crippling. I've seen it in students who join the Berkeley stat graduate program, and become surrounded by people who seem to be so much more capable, more productive, more promising than they are. This feeling of inferiority can kill their joy, extinguish their ambitions and make it hard or even impossible for them to continue. I try to point out that aptitude for statistics has many dimensions, and that even if it only had one dimension, there will always be people above you and people below you. Is it likely that the number one statistician is the only happy one? What does your position in the ranking matter if you are happy doing what you are doing? Again, the web has lots on this, including *How to Stop Comparing Yourself to Others,* and another aphorism attributed to Lao Tzu: *When you are content to be simply yourself and don't compare or compete, everyone will respect you.*

For me as a listener, my challenge is to get people moving in a better direction without telling them what to do. Writing (on the web) in *Psychology Today* Elizabeth R Thornton calls the issues I have discussed *mental models*, and asks: "Do yours help or hurt you?"

Statisticians are very familiar with models, and know that some are fit for their purpose, while others are not. We have diagnostics to examine models, and ways of finding better models. It seems to me that when one of us is unhappy for reasons similar to those I have described above, we might draw on the model analogy. We could scrutinize our current mental models for deficiencies, and perhaps move to alternatives that might help rather than hurt us. As with the statistics literature, there is lots of advice on how to do this in books, articles and blogs.

Changing your mental models might be all it takes to become happier.



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The 2016 Joint Statistical Meetings will be held July 30 to August 4 at McCormick Place, 2301 South Lake Shore Drive, Chicago, IL 60616. The theme of JSM 2016 is "The Extraordinary Power of Statistics."

The IMS program chair for invited sessions is Jan Hannig, University of North Carolina **e** jan.hannig@unc.edu. The contributed program chair is Alexander Aue, University of California, Davis **e** aaue@ucdavis.edu

Make a note of these important dates. Online submission of abstracts (all those except invited papers and panels) is open December 1, 2015–February 1, 2016. Topic-contributed session proposals must be submitted online by January 14, 2016, and Computer Technology Workshop (CTW) proposals by the following day. Submitted abstracts can be edited between March 31 and April 18, 2016.

Registration and housing open May 2, 2016, and the early registration deadline is June 1. The 2015 JSM housing reservations went very quickly, so if you are planning to attend, be sure to book your accommodation via the JSM website as soon after May 2 as possible.

IMS sponsored meetings: JSM dates for 2017–2021

IMS Annual Meeting @ JSM 2017:	JSM 2018	IMS Annual Meeting @ JSM 2019	JSM 2020	IMS Annual Meeting @ JSM 2021
July 29–August 3, 2017, Baltimore, MD	July 28–August 2, 2018 Vancouver, Canada	July 27–August 1, 2019, Denver, CO	August 1–6, 2020 Philadelphia, PA	August 7–12, 2021, Seattle, WA

IMS co-sponsored meeting

The 10th ICSA International Conference
December 19–22, 2016
Shanghai Jiao Tong University, Shanghai, China

IMS Rep: Ming Yuan, University of Wisconsin–Madison

w http://www.math.sjtu.edu.cn/conference/2016icsa/

The tenth ICSA international conference will be held at Xuhui campus of Shanghai Jiao Tong University in China. The theme is *Global Growth of Modern Statistics in the 21st Century*. The International Chinese Statistical Association (ICSA) is a non-profit organization, established in 1987, with the aim of promoting the theory and applications of statistical disciplines through scholarly activities, including publication of journals in statistics and probability, scientific meetings, and other educational programs. The plenary speakers are: Jim Berger, Tony Cai, Kai-Tai Fang, Zhiming Ma, Marc A. Suchard, Lee-Jen Wei and C.F. Jeff Wu.

The submission deadline for invited session proposals from the public is January 5, 2016. See the website for details.

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2016

IMS Annual Meeting/ 9th World Congress: Toronto, Canada, **July 11–15, 2016**

JSM: Chicago, IL, **July 30 – August 4, 2016**

2017

IMS Annual Meeting @ JSM: Baltimore, MD, **July 29 – August 3, 2017**

2018

IMS Annual Meeting: TBD

JSM: Vancouver, Canada, **July 28–August 2, 2018**

2019

IMS Annual Meeting @ JSM: Denver, CO, **July 27–August 1, 2019**

2020

IMS Annual Meeting: TBD

JSM: Philadelphia, **August 1–6, 2020**

IMS co-sponsored meeting

Advances in Statistics, Probability and Mathematical Physics
June 10–11, 2016
Pavia, Italy

w http://www-dimat.unipv.it/eugenioconference/

The conference will honor Eugenio Regazzini on the occasion of his 70th birthday. It will take place at the University of Pavia, Italy, on June 10–11, 2016. The program will feature invited talks of authoritative speakers who have been working on topics related to the ones Eugenio has contributed to in Statistics, Probability and Mathematical Physics.

Invited speakers: Jim Berger, Eric Carlen, Persi Diaconis, Ed George, Alexander Gnedin, Robert C. Griffiths, Ildar Ibragimov, Michael Jordan, Giovanni Peccati, R.V. Ramamoorthi, Chiara Sabatti.

IMS co-sponsored meeting

2017 IMS-China International Conference on Statistics and Probability
June 28–July 1, 2017. Nanning, Guangxi Province, China

w TBC

Local organizing committee chair: Zijia Peng, Guangxi University for Nationalities, China **e** pengzijia@126.com. Scientific program committee chair: Ming Yuan, University of Wisconsin–Madison, USA **e** myuan@stat.wisc.edu. The website is under construction, but please mark your calendars not for this conference.

IMS co-sponsored meeting

The 25th ICSA Applied Statistics Symposium 2016
June 12–15, 2016
Atlanta, Georgia, USA

w http://www.math.gsu.edu/~icsa/

Contact: Yichuan Zhao **e** yichuan@gsu.edu

Keynote speakers: Bin Yu, David Madigan and Paul Albert; Banquet speaker Michael Eriksen. Details of the scientific programs are on the symposium website.

The 2016 Annual Meeting of the International Chinese Statistical Association will be held at the Hyatt Regency, 265 Peachtree Street, Atlanta, GA 30303.

The International Chinese Statistical Association (ICSA) is a non-profit organization dedicated to educational, charitable, and scientific purposes. Its membership is open to all individuals and organizations in all statistics-related areas.

See the website for calls for the Student Paper Award applications and short course proposals.

IMS co-sponsored meeting

2016 UK Easter Probability Meeting
April 4–8, 2016
Lancaster, UK

w http://www.lancaster.ac.uk/maths/easter-probability-meeting/
e probability@lancaster.ac.uk

The 2016 UK Easter Probability Meeting is on "Random Structures Arising in Physics and Analysis" and consists of four mini-courses and twelve invited talks. The mini-course speakers and topics are:

Alice Guionnet on "Random matrices, free probability and topological expansions",

Michel Ledoux on "Concentration inequalities: basics and some new challenges",

Jason Miller on "Quantum Loewner Evolution", and

Vladas Sidoravicius on "Three lectures on random walk in dynamically changing environments".

The invited speakers are Vincent Beffara, Dmitry Belyaev, Noam Berger, Natasha Blitvic, Erwin Bolthausen, Dimitris Cheliotis, Ivan Gentil, Jon Keating, Kay Kirkpatrick, Elizabeth Meckes, Anatoly Vershik and Fredrik Viklund.

There will also be shorter talks by PhD students, a poster session, an excursion and dinner-cruise in the Lake District National Park, and break-out sessions for discussing open problems.

Registration is open until 29th February 2016.

IMS co-sponsored meeting

Reproducibility of Research: Issues and Proposed Remedies
March 8–10, 2017
Washington DC, USA

w http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

This meeting is one of the Arthur M. Sackler Colloquia, which address scientific topics of broad and current interest that cut across the boundaries of traditional disciplines. Each year, three to four colloquia are scheduled, typically two days in length and international in scope. Each colloquium features presentations by leading scientists in the field and discussions among one hundred or more researchers with an interest in the topic.

This colloquium is organized by David B. Allison, Stephen E. Fienberg and Victoria Stodden.

More IMS meetings around the world

IMS sponsored meetings

ENAR Spring Meeting: March 6–9, 2016, Austin, Texas

w http://www.enar.org/meetings/spring2016/index.cfm

The 2016 ENAR Spring Meeting will be held at the JW Marriott Austin. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. The scientific program will cover topics of great interest to researchers and practitioners, such as data science (big data), genomics, clinical trials, neuroimaging, biomarkers, health policy, electronic health records, ecology, and epidemiology. Abstract submission: The abstract submission deadline for all contributed and invited papers/posters is October 15, 2015. This is also the submission deadline for the Distinguished Student Paper Awards.

Fostering Diversity in Biostatistics Workshop

On Sunday, March 6, 2016 ENAR will host a workshop to provide a forum for discussion of important issues related to diversity. Themes will include career and training opportunities within biostatistics. The workshop will focus on connecting underrepresented minority students interested in biostatistics with professional biostatisticians in academia, government and industry. Current biostatistics graduate students as well as biostatistics professionals in academia, government, and industry will share their experiences and discuss mentoring, recruiting, and retaining students in related graduate programs. Registration is required: see **w** http://www.enar.org/meetings/diversity/index.cfm

ENAR 2017 & 2018 dates

IMS sponsored meetings

March 6–9, 2016: in Austin, Texas
March 12–15, 2017: in Washington DC
March 25–28, 2018: in Atlanta, GA

w http://www.enar.org/meetings.cfm

IMS co-sponsored meeting

Seminar on Stochastic Processes (SSP) 2016
March 16–19, 2016
University of Maryland, College Park, MD

w https://www-math.umd.edu/seminar-on-stochastic-processes.html **[new website]**

The Seminar on Stochastic Processes (SSP) in 2016 will be held from Wednesday, March 16, through Saturday, March 19. It will be hosted by the University of Maryland. The local organizers will be Sandra Cerrai, Dmitry Dolgopyat, Mark Freidlin and Leonid Koralov.

The invited speakers will be:

- Claudio Landim (*who is the Kai Lai Chung Lecturer*)
- Louigi Addario-Berry
- Yuri Bakhtin
- Yimin Xiao
- Thaleia Zariphopoulou

The tutorial lectures will be delivered on March 16 by Konstantin Khanin.

The first Seminar on Stochastic Processes was organized in 1981 by Kai Lai Chung, Erhan Çinlar and Ronald Getoor.

IMS co-sponsored meeting

WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference
July 10–15, 2016
Victoria, BC, Canada

w http://biometricconference.org/conference-information/

The next WNAR Annual Meeting, in conjunction with the XXVIII International Biometric Conference (IBC2016), will be held July 10–15, 2016 at the Victoria Conference Centre in Victoria, British Columbia, Canada.

A list of invited sessions is at http://biometricconference.org/invited-sessions/. There will also be four full day short courses: *Analysis of life history data with multistate models* (Richard Cook and Jerry Lawless); *An introduction to the joint modelling of longitudinal and survival data* (Dimitris Rizopoulos); *A statistical approach to machine learning* (Andreas Ziegler and Marvin Wright); and *Design of complex experiments* (Andrew Mead and Steven Gilmour).

Registration will open later this year.

IMS co-sponsored meeting

UK Easter Probability Meeting 2016: Random Structures Arising in Physics and Analysis
April 4–8, 2016
Lancaster University, UK

w http://www.lancaster.ac.uk/maths/easter-probability-meeting/

Lancaster University, UK, is hosting the UK Easter Probability Meeting 2016, on "Random Structures Arising in Physics and Analysis". The meeting will take place from April 4–8, 2016. The UK Easter Probability Meeting is a long-standing tradition that brings together the UK probability community. The aim is to discuss recent developments, to speak about future research and also to give PhD students an opportunity to become part of the UK probability community. The 2016 meeting in Lancaster consists of four mini-courses of three lectures each, given by leading international researchers on current topics in probability theory. The remaining time is reserved for 45 minute talks by invited speakers, shorter talks by PhD students, a poster session and time for discussions.

IMS co-sponsored meeting

Stochastic Networks Conference 2016
June 20–24, 2016
San Diego, CA

w http://stochasticnetworks2016.ucsd.edu/

The aim of the conference is to bring together researchers who share an interest in stochastic network models, to survey recent developments, and to identify future research directions. As in the past, the 2016 meeting will be structured in a workshop format, with approximately 20 hour-long invited talks, allowing ample unscheduled time to maximize interactions between speakers and participants and to facilitate a fruitful exchange of ideas. In addition, there will be a poster session for contributed papers.

Stochastic networks is a multifaceted area of research dealing with the modeling, stability, control, performance, approximation, and design of stochastic networks. It gives rise to challenging and subtle mathematical problems, whose solution often requires a combination of ideas and techniques from several branches of mathematics, including probability theory, stochastic processes, analysis, optimization, algorithms, combinatorics, and graph theory. Research in this area is strongly motivated by applications in diverse domains, ranging from the traditional areas of telecommunications and manufacturing to service operations, biological and social networks, revenue management, and health care.

Like its predecessors, the 2016 Stochastic Networks Conference will emphasize new model structures and new mathematical problems that are motivated by contemporary developments in various application domains, as well as new mathematical methods for stochastic network analysis.

IMS co-sponsored meeting

Sixth IMS–ISBA joint meeting: BayesComp at MCMSki
January 5–7, 2016. Lenzerheide, Switzerland

w http://www.pages.drexel.edu/~mwl25/mcmskiV/program.html

The next joint IMS–ISBA meeting, also known among participants as "MCMSki V", will be held in Lenzerheide, Switzerland, from Tuesday, January 5 to Thursday, January 7, 2016. This year the meeting will be the first meeting of the newly created BayesComp section of ISBA. The InterDisciplinary Institute of Data Science at USI (Università della Svizzera Italiana) will co-sponsor the meeting and help with the organization. Other sponsors for MCMSki V include Springer, Google, the journal *Statistics and Computing*, Blossom Skis and Deviation Skis. MCMSki V will see the return of the Richard Tweedie ski race, on the afternoon of Wednesday January 6th. The fastest man and woman will be rewarded with a pair of skis (one pair each of Blossom skis and Deviation skis). The plenary speakers are Stephen Fienberg, Steve Scott, David Dunson, Krys Latuszynski, Tony Lelièvre.

IMS co-sponsored meeting

9th World Congress on Probability and Statistics
July 11–15, 2016. Toronto, Canada

w http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

This meeting is jointly sponsored by the Bernoulli Society and the IMS. The Scientific Programme Chair is Alison Etheridge. The Local Chair is Tom Salisbury.

The 9th World Congress on Probability and Statistics will be hosted by the Fields Institute. Previous congresses have been held in Istanbul (2012), Singapore (2008), Barcelona (2004), Guanajuato (2000), Vienna (1996), Chapel Hill (1994), Uppsala (1990), and Tashkent (1986).

IMS co-sponsored meeting

Fourth IMS Asia Pacific Rim Meeting
June 27–30, 2016
Hong Kong, China

w http://ims-aprm2016.sta.cuhk.edu.hk/

The Institute of Mathematical Statistics Asia Pacific Rim Meeting series promotes interaction and networking among statisticians and probabilists from Asia, the Pacific Rim, and other parts of the world. The previous three meetings were successfully held in Seoul, Tsukuba, and Taipei. We are pleased to announce that the fourth meeting will take place on the beautiful campus of The Chinese University of Hong Kong, during the period June 27–30, 2016. The program covers recent developments and the state-of-the-art in a variety of modern research topics in statistics and probability. For more information, you may contact the program chairs: Ming-Yen Cheng (cheng@math.ntu.edu.tw) and Xuming He (xmhe@umich.edu).

IMS co-sponsored meeting

39th Conference on Stochastic Processes and their Applications (SPA)
July 24–28, 2017
Moscow, Russia

w TBC

Other meetings and events around the world

Big Data for Official Statistics Competition

Register by 10 January 2016

http://www.cros-portal.eu/content/call-participation

The Big Data for Official Statistics Competition (BDCOMP) has just been launched, and you are most welcome to participate. All details are provided in the call for participation at the link above. Participation is open to everybody (with a few very specific exceptions detailed in the call).

In this first instalment of BDCOMP, the competition is exclusively about nowcasting economic indicators at national or European level.

There are 7 tracks in the competition. They correspond to 4 main indicators: Unemployment, HICP, Tourism and Retail Trade and some of their variants.

Usage of Big Data is encouraged but not mandatory. For a detailed description of the competition tasks, please refer to the call.

The authors of the best-performing submissions for each track will be invited to present their work at the NTTS 2017 conference (the exact award criteria can be found in the call).

The deadline for registration is 10 January 2016. The duration of the competition is roughly a year (including about a month for evaluation).

Contact: ESTAT-BDCOMP@ec.europa.eu

Mathematics Research Community on Algebraic Statistics

NEW

June 12–18, 2016

Snowbird, Utah, USA

w http://www.ams.org/programs/research-communities/mrc

Contact: Tom Barr thb@ams.org

The conference on Algebraic Statistics is one of four MRCs for early-career mathematicians run by the American Mathematical Society. Funded by NSF, MRCs foster the formation of self-sustaining cohorts of mathematical scientists centered on research areas of common interest. The program provides participants travel, room, and board at the conference site and supports subsequent travel to the Joint Mathematics Meetings and a limited number of follow-up collaboration gatherings. Applications are accepted until March 1, 2016.

61st ISI World Statistics Congress 2017

NEW

July 16–21, 2017

Marrakech, Morocco

w http://www.isi2017.org/

Invited Paper Sessions and Special Topic Sessions: Call for Proposals

The Chair of the Scientific Programme Committee, Fabrizio Ruggeri, and the Chair of the Local Programme Committee, Mohamed Taamouti, invite the statistical community to present proposals for the Invited Paper Sessions (IPS) and Special Topic Sessions (STS). Invited Paper Sessions at the ISI World Statistics Congresses (WSC) serve to increase awareness about statistical research and to bring new research results to a broad audience. The 61st WSC of the ISI will highlight the contributions that Statistics can make to the advancement of science and to human health and welfare across the globe. The WSC will host talks on a wide variety of topics, with the overall goal of presenting a balanced programme that provides a sense of the current state of the field. The WSC will feature state-of-the-art presentations on the various aspects of statistical work, including new theoretical findings in Probability and Statistics, advances in applied statistical methods and recent developments in the application of Statistics in areas of broad interest and importance.

To ensure full consideration, please submit your IPS proposals by 15 February 2016. Each proposal should include a brief description and justification for the proposed session and a list of speakers and discussants who have agreed to participate. The selection criteria will take into account diversity, scientific quality and impact.

The 2017 WSC also has Special Topic Sessions (STS), to be selected by the Local Programme Committee (LPC). Proposals for STS can be submitted by individual members of the ISI and Associations, ISI Committees, or outside institutions and organisations. An STS usually consists of 4-5 papers and possibly a discussant invited by the organiser. The deadline for STS proposals is 1 August 2016, with submissions possible starting from 1 March 2016.

Contributed Papers/Posters: Information about submitting Contributed Papers and Posters will be available on the ISI and WSC websites in the course of 2016. We anticipate that the submission period will be from 15 September 2016 to 1 February 2017.

For further information about the WSC, please visit http://www.isi2017.org/. The key dates for the IPS, STS and CPS can be found here. General questions about the scientific programme should be directed to Fabrizio Ruggeri at fabrizio@mi.imati.cnr.it. For questions about Special Topic Sessions, please contact Mohamed Taamouti at m.taamouti@bkam.ma. For information about the ISI and its Associations, visit the ISI website.

International Workshop on Mathematical Reliability and Safety (MRS 2016)

NEW

June 23–25, 2016
Xuzhou, China

w http://mrs2016.jsnu.edu.cn/

The international workshop on Mathematical Reliability and Safety (MRS 2016) aims to bring active experts in various fields including reliability theory, risk management, statistics, and safety to exchange the newest developments, and promote advances in reliability and safety. The topics of interest include, but are not limited to: Reliability theory; Stochastic orders; Risk and security; Extreme value theory; Order statistics; Dependence modeling.

The workshop will be held from June 23 to 25, 2016 at Jiangsu Normal University, Xuzhou, China. Xuzhou City is one of Chinese most well-known transportation hubs, with China's two most important rail lines that run north–south, and east–west directions. With a history of 2,600 years, Xuzhou is a historical city with the critical strategic importance from military views. Xuzhou is well known for its heritage and cultural relics for the Han Culture, which is honored the best city to search or eye-view these splendid items, displaying in its museums. There are total more than 200 Han tombs discovered, with thousands of unearthed priceless funerary objects and terracotta warriors.

The keynote speakers are Narayanaswamy Balakrishnan, McMaster University, Canada; Sheldon M. Ross, University of Southern California, USA; Taizhong Hu, University of Science and Technology of China, China.

MRS 2016 is supported by: the Priority Academic Program Development of Jiangsu Higher Education Institutions; the National Natural Science Foundation of China; and Jiangsu Normal University.

Dependence, Stability and Extremes

NEW

May 2–6, 2016
Fields Institute, Toronto, Canada

w http://www.fields.utoronto.ca/programs/scientific/15-16/dependence/

The workshop presents recent results in areas related to heavy tails, extremes and dependence, including topics on a) weak convergence for heavy tailed dependent processes and time series; b) stationary and stable processes; c) stable random fields; d) regular variation and heavy tails; e) complex stochastic systems: random matrices and random networks with heavy tails. The workshop will feature four expository lectures by Gennady Samorodnitsky and Clément Dombry on related background for graduate students and people interested in these areas, and include around 20 talks on recent research advances by well-established or young researchers. There are also a few open problem sessions and a poster session. Funding opportunities are available, with priority given to graduate students and junior researchers.

NIMBioS Tutorial: Game Theoretical Modeling of Evolution in Structured Populations

NEW

April 25–27, 2016
NIMBioS at the University of Tennessee, Knoxville, USA

w http://www.nimbios.org/tutorials/TT_gametheory

Participants will be introduced to the discrete graph theory methods and models of structured population as well as classical continuous models based on differential equations. They will learn how to use such methods and/or build and analyze models in the context of the tutorial's topics and will work in small groups to experience how to use the methodology to describe, simulate, and analyze the relevant biological systems. Participants will be exposed to software that implements the mathematical methods, aids visualization, and facilitates computations and analyses. Participants will learn how the tutorial materials may fit into mathematics and biology courses or be used as an introduction to independent studies or undergraduate research.

Participation in NIMBioS tutorials is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks after the application deadline. If needed, financial support for travel, meals, and lodging is available for tutorial attendees.

Application deadline: February 15, 2016

Small Area Estimation Conference 2016

NEW

August 17–19, 2016
Maastricht, The Netherlands

w http://www.sae2016.nl

Contact: Bart Buelens **e** sae2016@cbs.nl

This conference continues a series of conferences on small area estimation that have been organized annually at different places around the world. It will give researchers and practitioners from all over the world an opportunity to exchange information or learn about state-of-the-art small area estimation techniques. So far small area estimation has predominantly been an academic area of research. The aim of this conference is to give more attention to applications and implementation in government agencies.

Employment Opportunities around the world

Australia: Canberra, ACT
The Australian National University
Lecturer or Senior Lecturer
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25941888

Australia: Melbourne, Victoria
University of Melbourne
Lecturer in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25728098

Austria: Vienna
University of Vienna,
Department of Statistics and Operations Research
Post-Doctoral Fellowship
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26159204

Austria: Vienna
University of Vienna,
Department of Statistics and Operations Research
Post-Doctoral Fellowship
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26159194

Canada: Mississauga, ON
University of Toronto Mississauga,

Department of Mathematical and Computational Sciences
Assistant Professor - Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25361671

Canada: Toronto, ON
University of Toronto
Assistant Professor - Machine Learning
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25361673

Canada: Toronto, ON
University of Toronto
Assistant Professor, Tenure-Stream, Actuarial Science or Assistant or Associate Professor, Statistical/Mathematical Finance
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25361662

Canada: Toronto, ON
University of Toronto,
Department of Statistical Sciences
Assistant Professor, Teaching Stream - Statistical Sciences
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25361624

China: Beijing
Tsinghua University,
Center for Statistical Science
Assistant/Associate/Full Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25672194

Kazakhstan: Astana
Nazarbayev University
Assistant, Associate and Full Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25460306

New Zealand: Auckland
University of Auckland,
Faculty of Science
Professional Teaching Fellow
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25727591

New Zealand: Auckland
The University of Auckland
Lecturer- Department of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25787968

Philippines: Mandaluyong City, Metro Manila
Asian Development Bank
Statistician
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25900574

Saudi Arabia: Thuwal
KAUST (King Abdullah University of Science and Technology)
Assistant, Associate, and Full Professors in Statistics (2016)
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25471112

Saudi Arabia: Thuwal
KAUST (King Abdullah University of Science and Technology)
Faculty Position in Statistics 2016
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26054911

United Kingdom: Nottingham

University of Nottingham, UK
Assistant Professor in Statistics (Permanent)

Institution: Reference: SCI129515X1
Closing Date: Friday 29 January 2016
Job Type: Research & Teaching
Department: Mathematical Sciences

Salary £34233 to £45954 per annum, depending on skills and experience. Salary progression beyond this scale is subject to performance.

Applications are invited from outstanding candidates for this post.

The successful candidate will be expected to contribute substantially to maintaining and enhancing the School's high standards in research and teaching.

Candidates should hold a PhD (or equivalent) in Statistics or a related subject and have a commitment to high-quality teaching in honours and service mathematics to a broad range of students. The post-holder will undertake original research of international excellence in Statistics, complementing existing activity within the School. Particular areas of interest include, but are not limited to, Data Science, Machine Learning and Uncertainty Quantification.

The REF 2014 results place the School in the top 10 nationally within Mathematical Sciences for 'research power' and 'research quality'; with 32% of its research recognised as world-leading and a further 56% as internationally excellent. Its research environment was classified as 75% world-leading in vitality and sustainability, with the remaining 25% internationally excellent, reflecting the outstanding setting the School provides for its academic staff as well as its postdoctoral and postgraduate researchers. Overall the University of Nottingham is ranked 8th in the UK in terms of Research Power.

In recognition of its commitment to promoting women in science, the University of Nottingham is one of five universities to hold a Silver Athena SWAN Award.

This post is available from 1 September 2016 or as soon as possible thereafter.

Informal enquiries may be addressed to Professor Andrew Wood, tel: +44 (0) 115 9514983 or email: andrew.wood@nottingham.ac.uk. Please note that applications sent directly to this email address will not be accepted. Information about the School is available at: http://www.nottingham.ac.uk/mathematics/index.aspx

To apply and for further details see http://www.nottingham.ac.uk/Jobs/CurrentVacancies/ref/SCI129515X1

Taiwan: Taipei

Institute of Statistical Science,
Academia Sinica

Regular Research Positions
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19863582

Taiwan: Taipei

Institute of Statistical Science,
Academia Sinica

Regular Research Positions
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25027515

United Kingdom: Cambridge

University of Cambridge,
Department of Pure Mathematics and Mathematical Statistics

Unestablished Lecturer in Analysis
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26036480

United Kingdom: Cambridge

University of Cambridge,
Department of Pure Mathematics and Mathematical Statistics

Research Associate
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25801564

United Kingdom: Nottingham

School of Mathematical Sciences,
University of Nottingham

Assistant Professor in Statistics (see left)
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25849949

United States: Fayetteville, AR

University of Arkansas,
Department of Mathematical Sciences

Tenure Track Assistant Professor: Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25432624

United States: La Jolla, CA

UC San Diego

Associate or Full Professor, Biostatistician with a focus in Neurosciences or in Translational Research
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25572626

Employment Opportunities continued

United States: Los Angeles, CA
UCLA Statistics and UCLA Mathematics
UCLA Joint Statistics and Mathematics Faculty Search
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25742154

United States: Stanford, CA
Stanford University,
Department of Statistics
Stein Fellow in Statistics or Probability
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24925365

United States: Stanford, CA
Stanford University,
Department of Statistics
Assistant Professor of Statistics or Probability
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24925346

United States: , CA
University of California,
Berkeley
Decision Analytics - IEOR Tenure/Tenure track
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25709245

United States: , CA
University of Southern California
Tenure-Track Statistics Position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25913929

United States: Fort Collins, CO
Colorado State University,
Department of Statistics
Research Faculty Appointment as Director of Statistical Laboratory
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25783199

United States: Storrs, CT
University of Connecticut
Assistant/Associate Professor, Department of Operations and Information Management
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25669249

United States: Gainesville, FL
University of Florida
Tenure-Track Assistant Professor in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26054905

United States: Orlando, FL
University of Central Florida,
Department of Mathematics
Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25621902

United States: Chicago, IL
The University of Chicago Booth School of Business
Assistant/Associate Professor of Econometrics and Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25213454

United States: Cambridge, MA
Massachusetts Institute of Technology
Statistician - Faculty Positions
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25454631

United States: Williamstown, MA
Williams College
Assistant Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24448901

United States: College Park, MD
University of Maryland
Michael and Eugenia Brin Chair
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25080593

United States: Duluth, MN
University of Minnesota Duluth,
Department of Mathematics and Statistics
Two Tenure Track Associate/Assistant Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25554898

United States: Minneapolis, MN
University of Minnesota,
School of Statistics
Tenure Track Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24931828

United States: Chapel Hill, NC

Department of Statistics and Operations Research

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25190407

United States: Lincoln, NE

Statistics Department,
University of Nebraska

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25485787

United States: Piscataway, NJ

Rutgers University,
Department of Statistics and Biostatistics

Open Rank Tenure-Track Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25851671

United States: Ithaca, NY

Cornell University

Biological Statistics & Computation Biology - Asst/Assoc. Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25475366

United States: Ithaca, NY

Cornell University

Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25473024

United States: New York, NY

Department of Statistics/Columbia University

Lecturer in Discipline

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25783059

Employment Opportunities continued

United States: Philadelphia, PA

University of Pennsylvania, Wharton Department of Statistics
Shepp Research Fellow and Lecturer in Statistics

The Department of Statistics at the Wharton School of the University of Pennsylvania seeks applicants to fill the position of "Shepp Research Fellow and Lecturer in Statistics".

Applicants must have outstanding communication skills, along with an interest in teaching undergraduate, PhD, and/or MBA students. The position will have a teaching load of two full-semester courses each academic year. Applicants should also demonstrate outstanding capacity and achievement in research.

Candidates must have a PhD in statistics or a related field (expected completion by June 30, 2017 is acceptable) from an accredited institution. The appointment is expected to begin July 1, 2016, and continue for two years with a possible extension of one additional year, based upon the needs of the department. This position is not eligible for tenure.

Please visit our website, https://statistics.wharton.upenn.edu/recruiting/lecturerpositions, for a description of the department and link to submit a CV and other relevant material. Any questions may be sent to statistics.recruit@wharton.upenn.edu.

The University of Pennsylvania is an EOE. Minorities / Women / Individuals with disabilities / Protected Veterans are encouraged to apply.

United States: Dayton, OH

Wright State University
Director of the Statistical Consulting Center (SCC) with a tenured position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25919341

United States: Philadelphia, PA

University of Pennsylvania,
Wharton Department of Statistics
Assistant, Associate, or Full Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25485982

United States: Pittsburgh, PA

Carnegie Mellon Univ
Asst Prof in Applied Statistical Machine Learning
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25583819

United States: University Park, PA

Department of Statistics - Penn State University
Tenured Full Professor Position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25807075

United States: Columbia, SC

University of South Carolina,
Department of Statistics
Assistant Professor, Dept. of Statistics/Dept. of Biological Sciences
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25582964

United States: Brookings, SD

South Dakota State University
Assistant Professor of Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=24995182

United States: Seattle, WA

University of Washington,
Department of Statistics
Statistics—Assistant or Associate Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25787537

International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the IMS logo, and new or updated entries have the NEW or UPDATED symbol. Please submit your meeting details and any corrections to Elyse Gustafson: erg@imstat.org

January 2016

IMS January 5–7: Lenzerheide, Switzerland. **Sixth IMS-ISBA joint meeting: BayesComp at MCMSki. w** http://www.pages.drexel.edu/~mwl25/mcmskiV/program.html

January 25–27: Lunteren, The Netherlands. **15th Winter School on Mathematical Finance w** https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html

February 2016

February 21–23: Osaka, Japan. **Fourth Asian Quantitative Finance Conference w** http://www.math.kansai-u.ac.jp/yamazaki/AQFC2016/

February 23–24: Miami, FL, USA. **CHI's Clinical Research Statistics for Non-Statisticians w** http://www.scopesummit.com/Clinical-Research-Statistics

March 2016

March 1–4: Bochum, Germany. **12th German Probability and Statistics Days 2016: Bochumer Stochastik-Tage w** http://www.gpsd-2016.de/

IMS March 6–9: Austin, TX. 2016 **ENAR/IMS Spring Meeting w** http://www.enar.org/meetings.cfm

IMS March 16–19: University of Maryland, College Park, MD, USA. **Seminar on Stochastic Processes (SSP) 2016 w** http://depts.washington.edu/ssproc/ssp_nextssp.php

April 2016

April 1–2: Cambridge, UK. **Info-Metrics Institute Spring 2016 Conference: Information-Theoretic Methods of Inference w** http://www.american.edu/cas/economics/info-metrics/conference/Info-Metrics-Spring-2016-conference.cfm

IMS April 4–8: Lancaster University, UK. **UK Easter Probability Meeting 2016:** Random Structures Arising in Physics and Analysis **w** http://www.lancaster.ac.uk/maths/easter-probability-meeting/

April 5–8: Lausanne, Switzerland. **SIAM Conference on Uncertainty Quantification w** http://www.siam.org/meetings/uq16/

NEW April 25–27: Knoxville, Tennessee, USA. **NIMBioS Tutorial: Game Theoretical Modeling of Evolution in Structured Populations w** http://www.nimbios.org/tutorials/TT_gametheory

May 2016

May 2–6: Fields Institute, Toronto, Canada. **Dependence, Stability, and Extremes w** http://www.fields.utoronto.ca/programs/scientific/15-16/dependence/

May 18–21: Cappadocia, Turkey. **International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications w** http://www.ic-smhd2016.com/

May 28–29: Istanbul, Turkey. **IWMST-2016: International Workshop on Mathematics and Statistics w** http://conf-scoop.org/science/iwmst

June 2016

June 1–4: Malta. **4th Stochastic Modeling Techniques & Data Analysis Conference w** http://www.smtda.net/smtda2016.html

June 6–10: Pittsburgh, PA, USA **Statistical Challenges in Modern Astronomy VI w** http://www.scma6.org

IMS June 10–11: Pavia, Italy. **Advances in Statistics, Probability and Mathematical Physics w** http://www-dimat.unipv.it/eugenioconference/

June 11–16: Avignon, France. **3rd ISNPS Conference w** http://www.isnpstat.org

IMS June 12–15: Atlanta, GA. **3rd ICSA Applied Statistics Symposium w** http://math.gsu.edu/~icsa/

NEW June 12–18: Snowbird, Utah, USA. **Mathematics Research Community on Algebraic Statistics w** http://www.ams.org/programs/research-communities/mrc

June 13–17: Sardinia, Italy. **ISBA 2016 World Meeting w** http://www.corsiecongressi.com/isba2016/

June 15–18: Cartagena, Colombia. **Second International Congress on Actuarial Science and Quantitative Finance w** http://icasqf.org

June 19–22: Santander, Spain. **36th International Symposium on Forecasting w** http://forecasters.org/isf/

June 20–23: Geneva, Switzerland. **ICES-V, the 5th International Conference on Establishment Statistics w** TBC

IMS June 20–24: San Diego, CA. **Stochastic Networks Conference 2016 w** http://stochasticnetworks2016.ucsd.edu/

Continues on **page 26**

International Calendar *continued*

NEW June 23–25: Xuzhou, China. **International Workshop on Mathematical Reliability and Safety (MRS 2016)** w http://mrs2016.jsnu.edu.cn/

ims June 27–30: Hong Kong, China. **Fourth IMS Asia Pacific Rim Meeting** w http://ims-aprm2016.sta.cuhk.edu.hk/

June 27–July 1: Barcelona, Spain. **3rd Barcelona Summer School on Stochastic Analysis** w http://www.crm.cat/en/Activities/Curs_2015-2016/Pages/3rd-BCN-Summer-School-on-Stochastic-Analysis.aspx

July 2016

ims July 10–15: Victoria, BC, Canada. **WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference** w http://biometricconference.org/conference-information/

ims July 11–15: Toronto, ON, Canada. **IMS Annual Meeting at 9th World Congress in Probability and Statistics** w http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

ims July 30 – August 4: Chicago, USA. **JSM 2016** w http://amstat.org/meetings/jsm/

August 2016

August 1–3: Ilulissat, Greenland. **Applied Probability Symposium** w http://thiele.au.dk/events/conferences/2016/ilulissat/

NEW August 17–19: Maastricht, The Netherlands. **Small Area Estimation Conference 2016** w http://www.sae2016.nl

August 21–24: Birmingham, UK. **International Society for Clinical Biostatistics 2016 Conference** w http://www.iscb2016.info/

August 24–26: Kerman, Iran. **13th Iranian Statistical Conference** w http://isc13.uk.ac.ir/index.php?slc_lang=en&sid=1

November 2016

November 9–13: Miami, FL. **International Conference on Questionnaire Design, Development, Evaluation, and Testing** w http://www.amstat.org/meetings/qdet2/index.cfm

December 2016

December 5–9: Canberra, Australia. **Australian Statistical Conference, 14th Australasian Data Mining Conference, 9th Conference on Teaching Statistics** w www.asc2016.com.au

ims December 19–22: Shanghai, China. **10th ICSA International Conference** w http://www.math.sjtu.edu.cn/conference/2016icsa/

March 2017

ims March 8–10: Washington DC, USA. **Reproducibility of Research: Issues and Proposed Remedies** w http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

June 2017

ims June 28–July 1: Nanning, Guangxi Province, China. **2017 IMS-China International Conference on Statistics and Probability** w TBC

July 2017

July 9–13: Vigo, Spain. **38th Annual Conference of the International Society for Clinical Biostatistics** w TBC

NEW July 16–21: Marrakech, Morocco. **61st ISI World Statistics Congress 2017** w http://www.isi2017.org/

ims July 24–28: Moscow, Russia. **39th Conference on Stochastic Processes and their Applications (SPA)** w TBC

ims July 29 – August 3: Baltimore, USA. **IMS Annual Meeting at JSM 2017** w http://amstat.org/meetings/jsm/

July 2018

ims July: Date and location TBC. **IMS Annual Meeting**

July 9–13: Edinburgh, UK. **ISBA 2018 World Meeting** w TBC

ims July 28 – August 2: Vancouver, Canada. **JSM 2018** w http://amstat.org/meetings/jsm/

July 2019

ims July 27–August 1: Denver, CO, USA. **IMS Annual Meeting at JSM 2019** w http://amstat.org/meetings/jsm/

August 2020

ims August 1–6: Philadelphia, PA, USA. **JSM 2020** w http://amstat.org/meetings/jsm/

August 2021

ims August 7–12: Seattle, WA, USA. **JSM 2021** w http://amstat.org/meetings/jsm/

See the full list at **imstat.org/meetings**

Membership and Subscription Information

Journals

The scientific journals of the Institute of Mathematical Statistics are *The Annals of Statistics*, *The Annals of Probability, The Annals of Applied Statistics*, *The Annals of Applied Probability*, and *Statistical Science*. The *IMS Bulletin* is the news organ of the Institute.

Individual Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of $115. An additional $74 is added to the dues of members for each scientific journal selected ($49 for *Stat Sci*). **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2016 are available to *The Annals of Applied Probability* ($199), *The Annals of Applied Statistics* ($199), *The Annals of Probability* ($199), *The Annals of Statistics* ($199), *Statistical Science* ($174), and *IMS Bulletin* ($125). **General subscriptions** are for libraries, institutions, and any multiple-readership use. Institutional subscriptions for 2016 are available to *The Annals of Applied Probability* ($475), *The Annals of Applied Statistics* ($475), *The Annals of Probability* ($475), *The Annals of Statistics* ($475), *Statistical Science* ($270), and *IMS Bulletin* ($118). Airmail rates for delivery outside North America are $135 per title.

IMS Bulletin

The *IMS Bulletin* publishes articles and news of interest to IMS members and to statisticians and probabilists in general, as well as details of IMS meetings and an international calendar of statistical events. Views and opinions in editorials and articles are not to be understood as official expressions of the Institute's policy unless so stated; publication does not necessarily imply endorsement in any way of the opinions expressed therein, and the *IMS Bulletin* and its publisher do not accept any responsibility for them. The *IMS Bulletin* is copyrighted and authors of individual articles may be asked to sign a copyright transfer to the IMS before publication.

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Advertising job vacancies

A single 60-day online job posting costs just $285.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See http://jobs.imstat.org

Advertising meetings, workshops and conferences

Meeting announcements in the *Bulletin* and on the IMS website at http://imstat.org/meetings are free. Send them to Elyse Gustafson; see http://www.imstat.org/program/prog_announce.htm

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Issue	Deadline	Online by	Mailed
1: January/February	**December 1**	December 15	January 1
2: March	**February 1**	February 15	March 1
3: April/May	**March 15**	April 1	April 15
4: June/July	**May 1**	May 15	June 1
5: August	**June 15**	July 15	August 1
6: September	**August 15**	September 1	September 15
7: Oct/Nov	**September 15**	October 1	October 15
8: December	**November 1**	November 15	December 1

** Note that the August 2016 issue has an early deadline of June 15*

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